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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,331	04/04/2001	Jukka Suonvieri	4925-104PUS	8413

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EXAMINER

CHO, UN C

ART UNIT PAPER NUMBER

2687

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/786,331

Applicant(s)

SUONVIERI, JUKKA

Examiner

Un C. Cho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.  
4a) Of the above claim(s) 1-20,23,24 and 34 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 21,22,25-33 and 35-41 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 32 and 38 are objected to because of the following informalities:

Regarding claim 32, line 1 of the claim recites, "... wherein as least one of said network elements ..." it should be "... wherein at least one of said network elements ..." instead.

Regarding claim 38, line 8 of the claim recites, "... a communication is relayed via is relayed via the communication relaying elements ..." it should be "... a communication is relayed via the communication relaying elements ..." instead.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 21, 22, 26, 28, 29, 31 – 33, 35 and 38 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassirat (US 6,507,741 B1) in view of Rees et al. (US 5,471,649).

Regarding claim 21, Bassirat discloses a method for detecting network elements relaying communications between a base station in a mobile communication network, said method comprising: monitoring time delays associated with communications between the base stations and the mobile stations (Bassirat, Col. 7, line 66 through Col. 8, line 6); and determining whether a communication was relayed via at least one of the network elements by detecting an increased time delay as compared to a known time delay of mobile stations communicating directly with the base stations (Bassirat, Col. 8, lines 7 – 67).

However, Bassirat as applied above does not specifically disclose calculating a timing advance which corresponds to time delays associated with communication between the base stations and the mobile stations. In an analogous art, Rees discloses calculating a timing advance, which corresponds to time delays associated with communication between the base stations and the mobile stations (timing advance will depend upon the propagation delay, Rees, Col. 1, lines 39 – 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Rees to the system of Bassirat in order to determine whether a communication was relayed via at least one of the network elements if the timing advance has a

value which is greater than a predetermined value, whereas timing advance depends critically on time delay thus either values (time delay or timing advance) can be used to determine whether the signal was relayed.

Regarding claim 22, Bassirat in view of Rees as applied above discloses identifying the communication relaying elements (RF repeater) on the ground of communication time delays (Bassirat, Col. 8, lines 37 – 44).

Regarding claim 26, Bassirat in view of Rees as applied above discloses wherein the mobile communication network is a GSM network (Bassirat, Col. 15, lines 48 – 55).

Regarding claim 28, Bassirat in view of Rees as applied above discloses time delays being monitored by a base transceiver station (Base Station, Bassirat, Col. 8, lines 42 – 44).

Regarding claim 29, Bassirat in view of Rees as applied above discloses time delays being monitored by a base station controller (Base station transmitting information to the mobile switching center, Bassirat, Col.8, lines 62 – 67).

Regarding claim 31, Bassirat in view of Rees as applied above discloses that said element is a radio repeater (RF repeater, Bassirat, Col. 7, lines 51 – 56).

Regarding claim 32, Bassirat in view of Rees as applied above discloses that said element is an optical tunneling configuration (optical fiber interface, Bassirat, Col. 7, lines 51 – 56).

Regarding claim 33, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding claim 35, the claim is interpreted and rejected for the same reason as set forth in claim 26.

Regarding claim 38, the claim is interpreted and rejected for the same reason as set forth in claim 21.

Regarding claim 39, the claim is interpreted and rejected for the same reason as set forth in claim 28.

Regarding claim 40, the claim is interpreted and rejected for the same reason as set forth in claim 29.

Regarding claim 41, Bassirat in view of Rees as applied above discloses determining whether a communication was relayed via at least one of the network elements is performed without requiring any additional monitoring equipment to be located in the network element performing the relaying and without requiring any additional signaling to be generated by the network element performing the relaying (base station has the capability of distinguishing the signals and by using the time delays for each of the signals respectively not the repeater, Bassirat, Col. 7, line 66 through Col. 8, line 67).

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bassirat in view of Rees as applied to claim 21 above, and further in view of Heyl et al. (US 5,613,010).

Regarding claim 25, Bassirat in view of Rees as applied to claim 21 above does not specifically disclose that predetermined value is zero. In an analogous art, Heyl discloses that the predetermined value is zero (Heyl, Col. 7, lines 3 – 5). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Heyl to the modified system of Bassirat and Rees in order to compare the signal to a reference signal.

6. Claims 27, 30, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassirat in view of Rees as applied to claim 21 above, and further in view of Prithviraj et al. (US 5,987,513).

Regarding claim 27, Bassirat in view of Rees as applied above does not specifically disclose sending an event notice to a network management system, when a presence of at least one of said elements is detected for the first time. In an analogous art, Prithviraj discloses sending an event trap to NMS (Network Management Stations), when a malfunction of one of said network element (Fig. 3, 360) is detected (Prithviraj, Col. 10, lines 3 – 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Prithviraj to the system of Bassirat and Rees in order to know significant events, which may have occurred around the time a problem has precipitated in the network.

Regarding claim 30, Bassirat in view of Rees and further in view of Prithviraj as applied above discloses monitoring the communication relayed via at

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least one of the network elements (monitoring communication relayed through the repeaters, Bassirat, Col. 7, line 66 through Col. 8, line 67) and determining status information about the functioning of the network elements (Prithviraj, Col. 10 – lines 3 – 6).

Regarding claim 36, the claim is interpreted and rejected for the same reason as set forth in claim 27.

Regarding claim 37, the claim is interpreted and rejected for the same reason as set forth in claim 30.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 21 - 41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SONNY TRINH  
PRIMARY EXAMINER

Un C Cho  
Examiner  
Art Unit 2687

8/30/05 UC